# ABSTRACT

A hybrid airgun includes a compressed gas chamber; a barrel; a firing valve between chamber and barrel; a secondary cylinder divided into front and back volumes by a secondary piston, the front volume connected to the chamber; a liquefied gas chamber connected to the back volume; a valve for transferring liquefied gas into the liquefied gas chamber; a cocking mechanism; and a firing mechanism. The cocking mechanism fills the compressed gas chamber with a compressed first gas, and/or transfers a liquefied second gas into the liquefied gas chamber. The firing mechanism opens the firing valve. During flow of the first gas into the barrel, pressure exerted by the second gas in the back volume moves the secondary piston and partially disengages it from the secondary cylinder, thereby enabling the second gas to flow into the compressed gas chamber, through the firing valve, and into the barrel.